REMARKS

Applicants request reconsideration of the application as amended. The specification was amended to correct obvious minor typographical errors.

Claims 1, 2, 4 to 10 and 12 to 19 are pending. Claims 3 and 11 have been canceled. Claims 1, 4, 9 and 12 are amended. For clearer understanding of the polyol component, the limitations from claims 3 and 11 have been introduced into claims 1 and 9, respectively. Claims 4 and 12 were amended to correct dependency because they had previously depended from the claims that have been canceled.

Claims 1 and 9 are the sole independent claims. Applicants' invention solves the special problem of forming a polyurethane foam with a higher density, fine pore size and sufficient static dissipative characteristic to function in such applications as printer rollers. Applicants disclose and claim methods for forming polyurethane foams and parts from polyurethane foams where the foams are cured by "free rise expansion" (that is, not in a closed mold). Such "free rise expansion" produced foams that were better suited for making foam parts such as printer rollers as compared to prior molded foams. Both claims 1 and 9 require foaming in an open container or moving conveyer to permit "free rise expansion". The foams nevertheless have the desired high density (6 to 20 pounds per cubic foot) and fine pore size (100 to 250 pores per inch) and surface resistivity. The combination of polyether graft polyol, optionally with polyether polyol or polyester polyol, with a polyisocyanate and a lower amount of water as the blowing agent produces the higher density foam. Anti-static additives are incorporated into the mixture to achieve the surface resistivity (static dissipative quality) desired.

Claims 1 to 19 were rejected under 35 U.S.C. §103(a) as obvious over the disclosure of U.S. Patent 6,136,879 (Nishida) in view of U.S. Patent 4,621,106 (Fracalossi). Applicants traverse the rejection as to all pending claims.

Nishida concerns formulations for making soft polyurethane foams suitable for automotive seat cushions and head rests. Nishida mentions polymer polyols, polyether polyols

and polyester polyols foamed by reaction with polyisocyanates. Nishida does not add antistatic additives, does not specify a reduced amount of water as blowing agent, does not seek fine pore size foam, and does not foam under free rise expansion conditions. Indeed, Nishida expressly indicates throughout that the foams are molded to the shape of the head rest or seat cushion (*e.g.*, Col. 17, line 56; Col. 18, line 6; Col. 18, line 23; Col. 22, line 32). Nishida indicates that the foam presses against the mold surfaces as it expands. All working examples cure the foams in closed molds. Persons seeking to form higher density polyurethane foams with anti-static properties and fine pore size would not be disposed to even consider Nishida, which is directed to an entirely different foaming system and associated foaming conditions.

Fracalossi does not fill the gaps in Nishida. While Fracalossi does seek to produce foams with anti-static properties, none of these foams are formed with polyether graft polyols. Fracalossi specifically adds anti-static additives and a haloacetic acid to a foam composition that includes only polyester polyols. Fracalossi produces foams that have effective surface resistance to make them static dissipative foams. However, these are not polyether polyurethane foams and were not made with polyether graft polyol. Moreover, all working examples in Fracalossi produced foams with densities of 1.7 to 2.0 pounds per cubic foot, well below the 6 to 20 pounds per cubic foot specified in pending claims 1 and 9. The working examples in Fracalossi also produced larger pore size foams (40 to 60 pores per inch) than the 100 to 250 pores per inch specified in pending claims 1 and 9.

Persons seeking to prepare static dissipative foams would not be motivated to try to combine Nishida and Fracalossi. Nishida is silent concerning static dissipation. Fracalossi only uses polyester polyols and makes no suggestion to try any other polyols. Polyester polyurethane foams tend to have better static dissipative characteristics, particularly at higher densities, than polyether polyurethane foams. In view of Fracalossi's teaching for polyester polyols, there would be no reason to switch to a polyol combination that included a polyether graft polyol, which skilled persons would expect to produce a foam that has lesser static dissipative qualities. Yet, claims 1 and 9 specifically require a polyether graft polyol, optionally mixed with a

polyether polyol or a polyester polyol.

The Examiner may not pick and choose only the favorable teachings from Nishida and Fracalossi in disregard of the teachings that lead away from Applicants' claimed invention. Nishida has nothing to do with methods for making static dissipative foams. Fracalossi uses a different polyol system already understood to have better static dissipative qualities, and makes a purported improvement to that system. There is nothing in the prior art that suggests the combination of Fracalossi with Nishida should be attempted. Even if the combination were attempted, Nishida concerns molded foams that are not foamed under free rise conditions. Fracalossi does not indicate how foams were cured, but produced working examples with foams of densities below the high density range claimed by the present Applicants. There is no prima facie obviousness.

Applicants unexpectedly discovered foam-forming methods wherein polyether graft polyols foamed under free rise conditions produce higher density, fine cell foams with anti-static properties. Such foams are especially suitable to be fabricated into rollers for printers. Claims 1, 2, 4 to 10 and 12 to 19 patentably distinguish from Nishida and Fracalossi.

No fee is believed due for this Amendment. Should the Commissioner determine that any fee is due before this paper may be considered, such as a fee for an extension of time, such extension is requested, and the Commissioner is authorized to charge the required fee to Deposit Account No. 03-2775.

Respectfully submitted,

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Date: March 1, 2005

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